

Transparent article having high visible transmittancePatent Number: ☐ US4828346Publication
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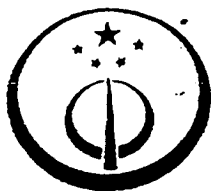
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☐ MX165693, NO863995, ZA8607041**Abstract**

A transparent article comprising a base, at least four coated layers, and a top protective layer is disclosed. The coated layers include a first dreflecting region, a transparent layer of silver or other metal, and a second dreflecting region comprising a layer of titanium dioxide and a layer of another dielectric mater. A titanium dioxide layer may also be a component of the first dreflecting region. Each dreflecting region that includes a titanium dioxide layer also comprises a layer of a transparent oxide or other dielectric material having an index of refraction intermediate between about 2.7, the approximate index of titanium dioxide, and the index of the nearby base or top layer, respectively. The intermediate index material is preferably zinc oxide because this material can be relatively quickly and inexpensively deposited by reaction sputtering. Also disclosed is a method for depositing the coated layers by sputtering and reactive sputtering of titanium and silver, zinc or other materials. The coating is useful as a component of a laminated window, particularly on electrically heated windshields for automobiles.

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[54] 发明名称 具有高可见光透射率的透明制品

[57] 摘要

本发明公开了包括一种基质, 至少四层涂层和一表面保护层的透明制品。这些涂层包括第一减反射层、是银或其他金属的透明层和由二氧化钛层和另一种电介质组成的第二减反射层。还公开了一种用溅射和反应溅射沉积钛、银、锌或其它材料涂层的方法。这种涂层是叠层玻璃窗的有用组成部分, 特别适用于汽车的电加热挡风玻璃。

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